ABSTRACT OF THE DISCLOSURE

A method for determining interactions between a number of optical channels in a wavelength division multiplexed signal wherein, given that during broadband optical transmission, the quality of a “Dense Wavelength Division Multiplexed” signal is adversely affected by multiple channel interactions, the method is used to determine the governing effects, the Kerr effect and the non-linear scattering process by evaluating the spectral profile of the Q factor or of the bit error rate.